North Lily Heap Leach Facility
Heap Leach Discharge Report
Second Quarter 2002

Permit No. UGW230001
North Lily Mining Ltd. Heap Leach Facility
Juab County, Utah
July 2002

Prepared for:

State of Utah
Division of Water Quality
Department of Environmental Quality
P.O. Box 144870
Salt Lake City, Utah 84114-4870
Attention: Ground Water Protection Section

Prepared by:

JBR Environmental Consultants, Inc.
8160 South Highland Drive, Suite A-4
Sandy, Utah 84093
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1.0 INTRODUCTION

On behalf of North Lily Mining Company (NLMC), JBR Environmental Consultants, Inc. (JBR) is reporting the 2nd quarter results of the Heap Leach effluent monitoring performed at the North Lily Heap Leach property located 5 miles south of Eureka, Utah, on Highway 6 (Figure 1). The effluent monitoring was performed as part of the stipulations stated in the Final Ground Water Discharge Permit No. UGW230001. This report includes a discussion of the field and laboratory activities performed to date. The most recent laboratory results are included in Appendix A and the latest discharge data are included in Appendix B.

2.0 METHODS

2.1 Weekly Site Survey

A JBR associate visits the North Lily site weekly to conduct a site specific survey of the property. The site survey consists of: monitoring the water flow (discharge) at the upper distribution box, visual observations of the discharge water, inspection of the property and the perimeter fence, observation of the soil conditions (any signs of erosion), and examination of the vegetation growth in the reclaimed areas.

Monitoring of the upper distribution box consists of removing three covers placed on top of the distribution box to enable a visual inspection of the leachate from the heap as it enters the distribution box. Once a visual observation has been made and noted, the discharge rate is measured using a one gallon container and a stop watch.

2.2 Quarterly Sampling Event

The sampling events are conducted on a quarterly schedule as shown in Table 2-1 and tested for the analytes listed in Table 2-2. The events consist of a site survey of the North Lily property and then the sampling of the discharge water at the upper distribution box. The three protective covers are removed to allow access to the inflowing discharge and an observation of the water is made and noted. Using a laboratory supplied 1-quart bottle, the discharge sample is collected and placed into the 1, 1 liter and 3, 0.5 liter laboratory supplied sample bottles. The sample bottles are then placed into a cooler containing ice, pending the delivery to Chemtech- Ford Analytical Laboratories for analysis. The leachate sample bottles are stored and transported using chain-of-custody procedures.

Table 2-1 Compliance Monitoring Reporting Schedule

Quarter	Report Due Date
1st (Jan., Feb., March)	April 15th
2nd (April, May, June)	July 15th
3rd (July, Aug., Sept.)	October 15th
4th (Oct., Nov., Dec.)	January 15th

Table 2-2 Analytes

Parameters	(UGWQS)	Parameters	(UGWQS)
pH	6.5-8.5	Calcium (mg/l) (* or ****)	NS
Conductance (umhos/cm) (*)	NS	Chromium (mg/l) (****)	0.1
Alkalinity as Bicarbonate (mg/l)(*)	NS	Copper (mg/l) (****)	1.3
Total Hardness (mg/l) (*)	NS	Magnesium (mg/l) (* or ****)	NS
Chloride (mg/l) (*)	NS	Manganese (mg/l) (****)	NS
Cyanide, Amenable to Cl_2 (mg/l) (**)	NS	Potassium (mg/l) (*)	NS
Cyanide, Total (mg/l) (**)	NS	Sodium (mg/l) (*)	NS
Cyanide, WAD (mg/l) (**)	0.2 (free)	Zinc (mg/l) (****)	5.0
Fluoride (*)	4.0	Arsenic (mg/l) (* or ****)	0.05
Nitrite, Nitrogen (mg/l) (***)	1.0	Cadmium (mg/l) (****)	0.005
Nitrate+Nitrite Total (mg/l) (***)	10.0	Mercury (mg/l) (****)	0.002
Sulfate (mg/l) (*)	NS	Lead (mg/l) (****)	0.015
Barium (mg/l) (* or ****)	2.0	Selenium (mg/l) (* or ****)	0.05
TDS (mg/l) (*)	NS	Silver (mg/l) (****)	0.1

Notes: (UGWQS) is Utah Ground Water Quality Standard, and NS indicates that there is not a Utah Ground Water Standard.
*=1 L untreated,
**= 0.5 L treated w/ NaOH,
***=0.5 L treated w/ H2SO4 (nutrients),
****= 0.5 L treated w/ HNO3 (metals)

3.0 RESULTS

3.1 Weekly Site Survey

The weekly site visits have shown a steady decrease in heap leach mound discharge since July of 2000. Recently the leachate discharge has fluctuated slightly, within permit limits, which can be attributed to various snow melt episodes. The discharge may be expected to decrease or stabilize through the summer months, with minor increases as a result of sporadic precipitation and the subsequent percolation into the mound.

3.2 Quarterly Sampling Event

JBR visited the site May 30, 2002 to sample the heap leach discharge effluent at the upper distribution box. The results of this sampling event along with the previous sampling results have been compiled and shown on Table 3-1. The laboratory reports and chain-of-custody documents for the 1st quarter sampling event can be found in Appendix A while the field notes can be found in Appendix C.

In most cases, the 2nd quarter results show that the concentrations of the analytes remained similar to, or below, those reported in the previous samples. The effluent still exhibits a yellowish tinge but does not contain any visible sediment particulates.

4.0 DISCUSSION AND CONCLUSIONS

Sampling data shown in Table 3-1 indicate that the overall concentrations present in the heap leach draindown continue to diminish in response to natural processes. Occasional increases in contaminant concentrations may be expected over time in response to the heterogeneities in the heap leach mound discharge. It is expected that the natural processes as well as the reclamation work conducted at the site will contribute to the overall decrease in contaminant concentrations in the future.

Table 3-1. Water Quality Summary - Leach Pad Draindown Fluid

North Lily Mining Company Silver City Facility

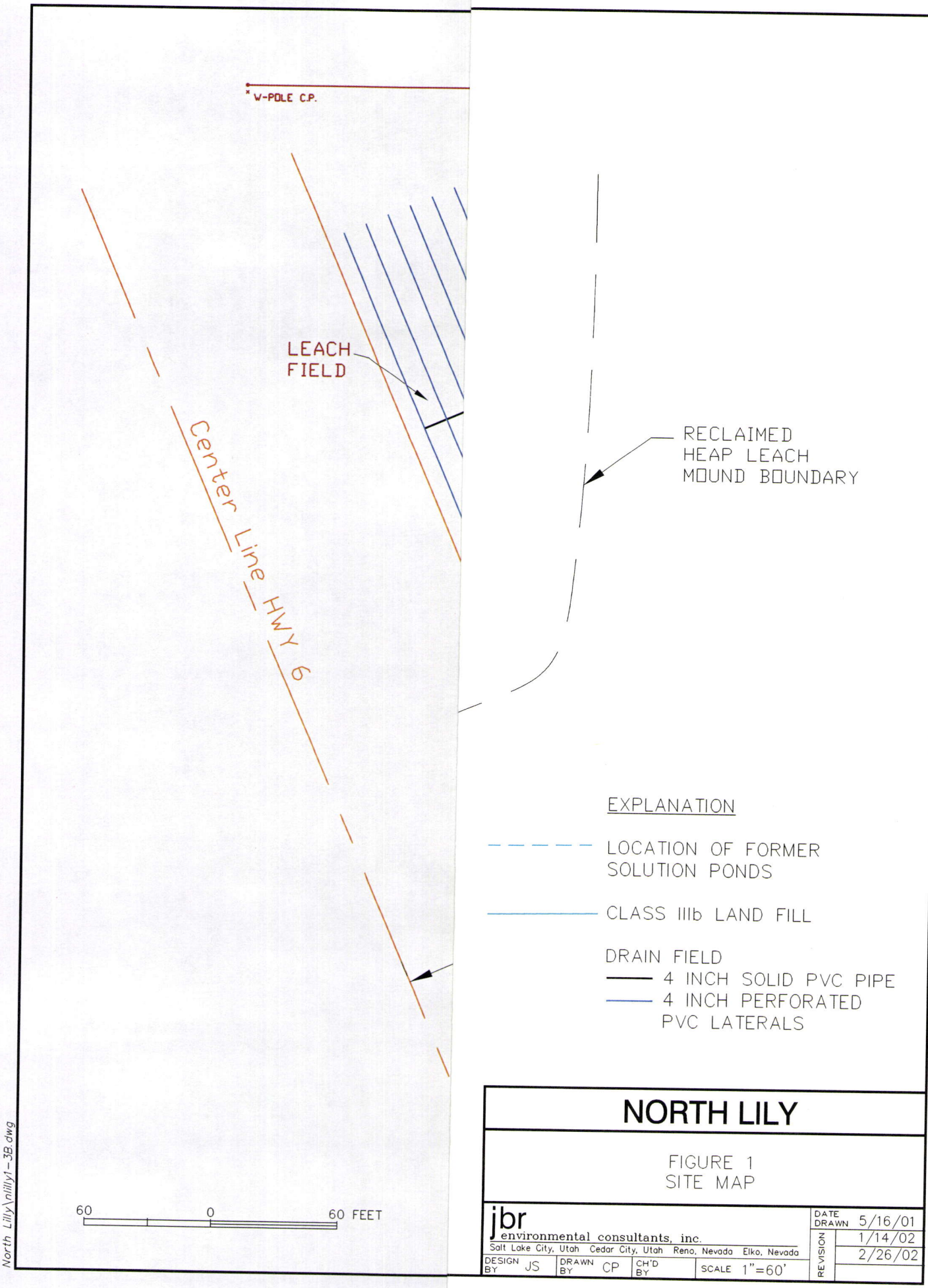
Date	??-99	Apr-00	Aug-00	May-01	Aug-01	Nov-01	Mar-02	May-02	Utah GroundWater Quality Standard	
Sampled by	DWQ	DWQ	JBR	JBR	JBR	JBR	JBR	JBR		
Parameter										
pH	9.1	8.7	8.1	8.2	7.8	7.6	7.5	7.5	6.5-8.5	downward
Conductance (umhos/cm)	23,000	22,000	23,300	22,000	19,000	21,000	20,000	20,000	NS	~ same
TDS (mg/l)	19,510	18,358	20,000	NA	NA	NA	NA	NA	NS	
Alkalinity as Bicarbonate (mg/l)	364	248	388	280	360	350	320	330	NS	~ same
Total Hardness (mg/l)	1,409.8	1,296.4	NA	NA	NA	NA	NA	NA	NS	
Chloride (mg/l)	2,125	2,025	2,220	2,100	1,900	1,900	1,800	1,700	NS	slow downtrend
Cyanide, Amenable to Cl_2 (mg/l)	20.865	34.87	18.8	16	4.3	2.8	2.6	0.61	NS	downward
Cyanide, Total (mg/l)	20.9	35	19.0	16	4.4	3.1	2.71	0.65	NS	"
Cyanide, WAD (mg/l)	NA	NA	14.40	12	0.52	0.42	0.53	0.42	0.2 (free)	"
Fluoride	NA	NA	6.7	5.6	3.2	3.2	3	2	4.0	
Nitrite, Nitrogen mg/l)	NA	NA	51	57	81	130	130	130	1.0	upward
Nitrate + Nitrite Total (mg/l)	124	2,110	145	160	280	310	500	500	10.0	upward
Sulfate (mg/l)	11,000	4,560	10,200	11,000	7,800	8,000	7,600	7,100	NS	down
Barium (mg/l)	0.015	ND	0.010	0.045	0.015	0.012	0.012	0.013	2.0	~ same
Calcium (mg/l)	539	481	350	280	400	410	420	440	NS	slight up
Chromium (mg/l)	0.009	ND	ND	ND	ND	ND	ND	ND	0.1	
Copper (mg/l)	5.70	0.332	19	15	3.1	2.6	1.9	2.0	1.3	~ down
Magnesium (mg/l)	15.8	0.234	29	110	48	53	64	61	NS	slight up
Manganese (mg/l)	0.130	0.110	NA	NA	NA	NA	NA	NA	NS	
Potassium (mg/l)	297	293	310	260	240	220	190	190	NS	slight down
Sodium (mg/l)	5,570	5,500	5,600	5,100	5,100	4,900	4,500	4,400	NS	slight down
Zinc (mg/l)	91	ND	0.42	0.48	1.4	2.2	3.2	3.2	5.0	up
Arsenic (mg/l)	0.900	76	0.2464	0.17	0.14	0.17	0.17	0.17	0.05	~ same
Cadmium (mg/l)	ND	ND	0.0076	0.006	0.0097	0.021	0.026	0.030	0.005	up
Mercury (mg/l)	NA	0.089	ND	0.019	0.015	0.0060	0.0072	0.0060	0.002	slight down
Lead (mg/l)	0.076	0.009	0.1581	0.2	0.085	0.18	0.28	0.39	0.015	up
Selenium (mg/l)	0.200	0.014	0.2707	0.15	0.12	0.20	0.17	0.17	0.05	
Silver (mg/l)	0.370	0.029	0.3147	0.64	0.08	0.069	0.98	0.075	0.1	up & down

NA = "Not Analyzed"

ND = "Not Detected"

NS = "No Standard"

Figure



North Lilly\nlilly1-3B.dwg

NORTH LILY

FIGURE 1
SITE MAP

jbr environmental consultants, inc.
Salt Lake City, Utah Cedar City, Utah Reno, Nevada Elko, Nevada

DESIGN BY	DRAWN BY	CH'D BY	SCALE
JS	CP		1"=60'

DATE DRAWN	5/16/01
REVISION	1/14/02
	2/26/02

Appendix A

Laboratory Results

Date: 6/21/02

JBR Consultants
attn. Jim Sage
8160 South Highland Drive, Ste. A-4
Sandy, UT 84093

Project: NLILY-01

Project Group No. 54915
Date Sample(s) Submitted: 5/30/02

This is the final report for project 54915 and contains 3 pages of information in addition to attachments. Individual pages or sections of this report may not be separated when using the information for regulatory compliance.

The analyses presented on this report were performed in accordance with National Environmental Laboratory Accreditation Program (NELAP), Section 5.13.

Please feel free to contact us at (801) 262-7299 or (801) 262-7378 (fax) if you have questions or comments regarding this report.

Dave Gayer
Laboratory Director
dave@chemtechford.com

Linda Daniels
Customer Representative

Approved By: _____
Dave Gayer, Laboratory Director

6100 SOUTH STRATLER
SALT LAKE CITY UTAH 84107 6905
801 262 7299 PHONE
801 262 7378 FAX

Lab No: 02-U004711
Report Date: 6/21/02

JBR Consultants
attn. Jim Sage
8160 South Highland Drive, Ste. A-4
Sandy, UT 84093

CERTIFICATE OF ANALYSIS

Sample Description: NLILY 05/30/02
Project: NLILY-01
Sample Matrix: WASTE WATER
Lab Group No: 54915
Date/Time Sampled: 5/30/02 , 13:05
Date/Time Received: 5/30/02 , 15:00
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Alkalinity,as Bicarbonate, mg/L	330	1	6/ 3/02 20:15	SM 2320B	CSM
Alkalinity, as Carbonate, mg/L	< 1	1	6/ 3/02 20:15	SM 2320B	CSM
Chemical Oxygen Demand, mg/L	330	10	5/31/02 23:00	HACH 8000	CSM
Chloride (IC), mg/L	1,700	50	5/31/02 17:00	EPA 300.0	CSM
Conductance, Specific, umhos/cm	20,000	1	5/31/02 14:45	EPA 120.1	KJM
Cyanide, Amenable to Cl2, mg/L	0.61	0.008	6/ 8/02 17:00	ASTM D2036	TC
Cyanide, Total, mg/L	0.65	0.016	5/22/02 15:00	ASTM D2036	TC
Cyanide, WAD, mg/L	0.42	0.008	6/ 8/02 17:00	ASTM D2036	TC
Fluoride (IC), mg/L	2	1	5/31/02 17:00	EPA 300.0	CSM
Nitrate, Nitrogen (IC), mg/L	500	5	5/31/02 17:00	EPA 300.0	CSM
Nitrite, Nitrogen (IC), mg/L	130	1	5/31/02 17:00	EPA 300.0	CSM
pH, units	7.5	0.1	5/31/02 22:30	EPA 150.1	EJB
Sulfate (IC), mg/L	7,100	50	5/31/02 17:00	EPA 300.0	CSM
Barium (T), as Ba, mg/L	0.013	0.005	6/18/02 10:00	EPA 200.7	MJB
Calcium (T), as Ca, mg/L	440	0.2	6/18/02 10:00	EPA 200.7	MJB
Chromium (T), as Cr, mg/L	< 0.005	0.005	6/18/02 10:00	EPA 200.7	MJB
Copper (T), as Cu, mg/L	2.0	0.01	6/18/02 10:00	EPA 200.7	MJB
Magnesium (T), as Mg, mg/L	61	0.2	6/18/02 10:00	EPA 200.7	MJB
Potassium (T), as K, mg/L	190	0.2	6/18/02 10:00	EPA 200.7	MJB
Sodium (T), as Na, mg/L	4,400	4	6/20/02 14:22	EPA 200.7	MJB
Zinc (T), as Zn, mg/L	3.2	0.01	6/18/02 10:00	EPA 200.7	MJB
Arsenic (T), as As, mg/L	0.17	0.0005	6/10/02 16:03	EPA 200.8	JJT
Cadmium (T), as Cd, mg/L	0.030	0.0005	6/10/02 16:03	EPA 200.8	JJT
Lead (T), as Pb, mg/L	0.39	0.001	6/10/02 16:03	EPA 200.8	JJT
Mercury (T), as Hg, mg/L	0.0060	0.0002	6/10/02 16:03	EPA 200.8	JJT
Selenium (T), as Se, mg/L	0.17	0.0005	6/10/02 16:03	EPA 200.8	JJT

RL = Minimum Reporting Limit

6100 SOUTH STRATLER
SALT LAKE CITY UTAH 84107 6905
801 262 7299 PHONE
801 262 7378 FAX

Lab No: 02-U004711
Report Date: 6/21/02

JBR Consultants
attn. Jim Sage
8160 South Highland Drive, Ste. A-4
Sandy, UT 84093

CERTIFICATE OF ANALYSIS

Sample Description: NLILY 05/30/02
Project: NLILY-01
Sample Matrix: WASTE WATER
Lab Group No: 54915
Date/Time Sampled: 5/30/02 , 13:05
Date/Time Received: 5/30/02 , 15:00
Sample Note(s):

Sample received on ice.

PARAMETER / UNITS	RESULT	MRL	DATE ANALYZED	METHOD	ANALYST
INORGANIC PARAMETERS					
Silver (T), as Ag, mg/L	0.075	0.0005	6/10/02 16:03	EPA 200.8	JJT
Temperature, Receiving, C	0.0		5/30/02 15:00		SPS

RL = Minimum Reporting Limit

6100 SOUTH STRATLER
SALT LAKE CITY UTAH 84107 6905
801 262 7299 PHONE
801 262 7378 FAX

CHEMTECH - FORD, INC.

ANALYSIS REQUEST FORM/CHAIN OF CUSTODY

COMPANY:	JBR ENVIRONMENTAL	**BILLING NAME:**	JIM SAGE JBR ENVIRONMENTAL
ADDRESS:	8160 SO HIGHLAND DRIVE	**BILLING ADDRESS:**	8160 SO. HIGHLAND DRIVE
CITY/STATE/ZIP:	SANDY, UTAH 84093	**P.O. #:**	NLILY-01
PHONE #:	943-4144 **FAX #:**	**TURNAROUND REQUIRED***	
COMPANY CONTACT:	JIM SAGE	*expedited turnaround subject to additional charge	
PROJECT:	NLILY-01		

_____Mark 'X' for copy to DEQ Div of Drinking Water

Lab ID#	SAMPLE IDENTIFICATION/LOCATION	SAMPLE DATE	SAMPLE TIME	Number of Containers	MATRIX: Water: Drink.,Waste,Ground (circle)	MATRIX: Soil / Solid (circle)	MATRIX: Sludge: Solid, Liquid (circle)	MATRIX: Oil	MATRIX: Solvent	MATRIX: Other (specify)	ANALYTES REQUESTED: Lab # 010 11383
4711	1. NLILY 5/30/02	5/30/02	1300	4	X						
	2.										
	3.										
	4.										
	5.										
	6.										
	7.										
	8.										
	9.										
	10.										

Sampled by: (print) Jim Sage
Sampled by: (signature) [signature]
Sample Receiving Temperature: (C) on ice

Special Instructions:

Sample Delivered by Courier:

Relinquished by: (signature)	Date/Time	Received by (signature):	Date/Time
[signature]	05/30/02 1500	S P Seymour	53002/15:00

CHEMTECH-FORD, INC. 6100 South Stratler (380 West) Murray, UT 84107 Phone 801-262-7299 Fax 801-262-7378

NET 30 DAYS: 1.5% PER MONTH INTEREST CHARGE (18% A.P.R.) CUSTOMER AGREES TO PAY COLLECTION COSTS AND ATTORNEY'S FEES.

WHITE: ORIGINAL YELLOW: CUSTOMER PINK: FILE

Appendix B

Heap Leach Discharge

North Lily Mining Company

EVAPORATION SYSTEM/LEACH FIELD GALLERY

Date	Daily Average (GPM)	Application Site	Return Rate (Feet)	ReturnRate (GPM)	Amount Pumped From Preg Pond
July 3, 2000	100	N/A	N/A		
July 4, 2000	100	N/A	N/A		
July 5, 2000	100	N/A	N/A		270
July 6, 2000	100	N/A	N/A		
July 7, 2000	100	N/A	N/A		
July 10, 2000	95	N/A	N/A		
July 11, 2000	95	N/A	N/A		
July 12, 2000	90	N/A	N/A		260
July 13, 2000	90	N/A	N/A		
July 14, 2000	95	N/A	N/A		
July 15, 2000	225	N/A	N/A		
July 17, 2000	N/A	Recycle into Preg	N/A		
July 18, 2000	220	N/A	N/A		
July 19, 2000	220	N/A	N/A		250
July 20, 2000	220	N/A	N/A		
July 21, 2000	220	N/A	N/A		
July 24, 2000	N/A	Recycle into Preg	N/A		
July 25, 2000	N/A	Recycle into Preg	N/A		280
July 26, 2000	300	Pad and Preg	N/A		
July 27, 2000	300	Pad and Preg	N/A		
July 28, 2000	300	Pad and Preg	N/A		
July 30, 2000	N/A	Recycle into Preg	0.24		
July 31, 2000	N/A	Overflow	0.24		
August 1, 2000	N/A	Overflow	0.24		270
August 2, 2000	N/A	Overflow	0.22		
August 3, 2000	N/A	Overflow	0.22		
August 6, 2000	N/A	Rec	N/A		
August 7, 2000	N/A	Rec	N/A		300
August 8, 2000	360	Pad and Preg	N/A		
August 9, 2000	360	Pad and Preg	N/A		
August 10, 2000	360	Pad and Preg	N/A		200
August 11, 2000	360	Pad and Preg	N/A		
August 12, 2000	360	Pad and Preg	N/A		
August 13, 2000	360	Rec	0.19	23.1	
August 14, 2000	360	Rec	0.19	23.1	
August 15, 2000	360	Rec	0.19	23.1	
August 16, 2000	360	Rec	0.19	23.1	490
August 17, 2000	360	Rec	0.2	25.0	
August 18, 2000	360	Rec	0.2	25.0	
August 19, 2000	360	Rec	0.21	27.0	
August 20, 2000	340	Rec	0.21	27.0	
August 21, 2000	340	Rec	0.21	27.0	
August 22, 2000	340	Rec	0.21	27.0	
August 23, 2000	340	Rec	0.21	27.0	

KEY
N/R = Not Recorded
N/A = Not Avaliable

6/27/02

North Lily Mining Company

EVAPORATION SYSTEM/LEACH FIELD GALLERY

August 24, 2000	340	Rec	0.21	27.0	500
August 27, 2000	350	Preg and Overflow	0.19	23.1	
August 28, 2000	220	Preg and Overflow	0.18	21.3	
August 29, 2000	220	Preg and Overflow	0.18	21.3	
August 30, 2000	340	Preg and Overflow	0.17	19.5	
August 31, 2000	200	Preg and Overflow	0.17	19.5	475
September 1, 2000	210	Preg and Overflow	0.16	17.7	
September 5, 2000	N/A	Recycle to preg pond	0.14	14.4	
September 6, 2000	N/A	Recycle to preg pond	0.14	14.4	
September 7, 2000	N/A	Recycle to preg pond	0.14	14.4	500
September 8, 2000	N/A	Recycle to preg pond	0.14	14.4	
September 9, 2000	N/A	Recycle to preg pond	0.13	12.8	
September 10, 2000	N/A	Recycle to preg pond	0.13	12.8	
September 11, 2000	N/A	Overflow Ponds	0.13	12.8	
September 12, 2000	N/A	Overflow Ponds	0.12	11.3	
September 13, 2000	N/A	Overflow Ponds	0.12	11.3	480
September 14, 2000	N/A	Overflow Ponds	0.12	11.3	
September 15, 2000	N/A	Overflow Ponds	0.12	11.3	
September 16, 2000	N/A	Overflow Ponds	0.12	11.3	
September 18, 2000	N/A	Recycle to preg pond	0.12	11.3	
September 19, 2000	N/A	Recycle to preg pond	0.12	11.3	
September 20, 2000	N/A	Recycle to preg pond	0.11	9.1	490
September 21, 2000	N/A	Recycle to preg pond	0.11	9.1	
September 22, 2000	N/A	Recycle to preg pond	0.11	9.1	
September 23, 2000	N/A	Recycle to preg pond	0.11	9.1	
September 25, 2000	N/A	Recycle to preg pond	0.11	9.1	
September 26, 2000	N/A	Recycle to preg pond	0.11	9.1	
September 27, 2000	N/A	Recycle to preg pond	0.11	9.1	475
September 28, 2000	N/A	Recycle to preg pond	0.10	8.6	
September 29, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 2, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 3, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 4, 2000	N/A	Recycle to preg pond	0.10	8.6	469
October 5, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 6, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 9, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 10, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 11, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 12, 2000	N/A	Recycle to preg pond	0.10	8.6	490
October 13, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 16, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 17, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 18, 2000	N/A	Recycle to preg pond	0.10	8.6	480
October 19, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 20, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 23, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 24, 2000	N/A	Recycle to preg pond	0.10	8.6	
October 25, 2000	N/A	Recycle to preg pond	0.09	7.3	440

KEY
N/R = Not Recorded
N/A = Not Avaliable

North Lily Mining Company

EVAPORATION SYSTEM/LEACH FIELD GALLERY

October 26, 2000	N/A	Recycle to preg pond	0.09	7.3	
October 27, 2000	N/A	Recycle to preg pond	0.09	7.3	
November 6, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 7, 2000	N/A	Recycle to preg pond	0.09	7.3	
November 8, 2000	N/A	Recycle to preg pond	0.09	7.3	390
November 9, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 10, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 13, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 14, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 15, 2000	N/A	Recycle to preg pond	0.10	8.6	390
November 16, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 17, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 20, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 21, 2000	N/A	Recycle to preg pond	0.10	8.6	
November 22, 2000	N/A	Recycle to preg pond	0.10	8.6	350
November 23, 2000	N/A	Recycle to preg pond	0.09	7.3	
November 24, 2000	N/A	Recycle to preg pond	0.09	7.3	
November 27, 2000	N/A	Recycle to preg pond	0.09	7.3	
November 28, 2000	N/A	Recycle to preg pond	0.09	7.3	
November 29, 2000	N/A	Recycle to preg pond	0.09	7.3	
November 30, 2000	N/A	Recycle to preg pond	0.09	7.3	300
December 1, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 4, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 5, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 6, 2000	N/A	Recycle to preg pond	0.09	7.3	300
December 7, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 8, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 11, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 12, 2000	N/A	Recycle to preg pond	0.09	7.3	300
December 13, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 14, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 15, 2000	N/A	Recycle to preg pond	0.09	7.3	
December 18, 2000	N/A	Recycle to preg pond	0.08	6.1	
December 19, 2000	N/A	Recycle to preg pond	0.08	6.1	
December 20, 2000	N/A	Recycle to preg pond	0.08	6.1	290
December 21, 2000	N/A	Recycle to preg pond	0.08	6.1	
December 22, 2000	N/A	Recycle to preg pond	0.08	6.1	
December 26, 2000	N/A	Recycle to preg pond	0.07	4.9	
December 27, 2000	N/A	Recycle to preg pond	0.07	4.9	
December 28, 2000	N/A	Recycle to preg pond	0.07	4.9	290
December 29, 2000	N/A	Recycle to preg pond	0.07	4.9	
January 2, 2001	N/A	Recycle to preg pond	0.07	4.9	
January 3, 2001	N/A	Recycle to preg pond	0.07	4.9	
January 4, 2001	N/A	Recycle to preg pond	0.07	4.9	280
January 5, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 8, 2001	N/A	Pump was off	0.06	3.6	
January 9, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 10, 2001	N/A	Recycle to preg pond	0.06	3.6	285

KEY
N/R = Not Recorded
N/A = Not Avaliable

North Lily Mining Company

EVAPORATION SYSTEM/LEACH FIELD GALLERY

January 11, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 12, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 15, 2001	N/A	Pump was off	0.06	3.6	
January 16, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 17, 2001	N/A	Recycle to preg pond	0.06	3.6	270
January 18, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 19, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 22, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 23, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 24, 2001	N/A	Recycle to preg pond	0.06	3.6	290
January 25, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 26, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 29, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 30, 2001	N/A	Recycle to preg pond	0.06	3.6	
January 31, 2001	N/A	Recycle to preg pond	0.06	3.6	285
February 1, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 2, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 5, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 6, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 7, 2001	N/A	Recycle to preg pond	0.06	3.6	285
February 8, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 9, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 12, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 13, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 14, 2001	N/A	Recycle to preg pond	0.06	3.6	320
February 15, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 16, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 17, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 19, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 20, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 21, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 22, 2001	N/A	Recycle to preg pond	0.06	3.6	310
February 23, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 26, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 27, 2001	N/A	Recycle to preg pond	0.06	3.6	
February 28, 2001	N/A	Recycle to preg pond	0.06	3.6	290
March 1, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 2, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 5, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 6, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 7, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 8, 2001	N/A	Recycle to preg pond	0.06	3.6	280
March 9, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 12, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 13, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 14, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 15, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 16, 2001	N/A	Recycle to preg pond	0.06	3.6	280

KEY
N/R = Not Recorded
N/A = Not Avaliable

North Lily Mining Company

EVAPORATION SYSTEM/LEACH FIELD GALLERY

March 19, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 20, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 21, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 22, 2001	N/A	Recycle to preg pond	0.06	3.6	280
March 23, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 26, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 27, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 28, 2001	N/A	Recycle to preg pond	0.06	3.6	
March 29, 2001	N/A	Recycle to preg pond	0.06	3.6	290
March 30, 2001	N/A	Recycle to preg pond	0.06	3.6	
April 2, 2001	N/A	Recycle to preg pond	0.06	3.6	
April 3, 2001	N/A	Recycle to preg pond	0.06	3.6	
April 4, 2001	N/A	Recycle to preg pond	0.06	3.6	
April 5, 2001	N/A	Recycle to preg pond	0.06	3.6	270
April 6, 2001	N/A	Recycle to preg pond	0.06	3.6	
May, 2001 Week 1	N/A	Drain Field	N/A	3.6	N/A
May, 2001 Week 2	N/A	Drain Field	N/A	3.6	N/A
May, 2001 Week 3	N/A	Drain Field	N/A	3.6	N/A
May, 2001 Week 4	N/A	Drain Field	N/A	3.6	N/A
June 6, 2001	N/A	Drain Field	N/A	3.6	N/A
June 13, 2001	N/A	Drain Field	N/A	3.6	N/A
June 20, 2001	N/A	Drain Field	N/A	3.6	N/A
June 27, 2001	N/A	Drain Field	N/A	3.6	N/A
July 3, 2001	N/A	Drain Field	N/A	3.6	N/A
July 11, 2001	N/A	Drain Field	N/A	3.6	N/A
July 18, 2001	N/A	Drain Field	N/A	3.6	N/A
July 23, 2001	N/A	Drain Field	N/A	3.6	N/A
August 1, 2001	N/A	Drain Field	N/A	3.0	N/A
August 8, 2001	N/A	Drain Field	N/A	3.0	N/A
August 15, 2001	N/A	Drain Field	N/A	3.0	N/A
August 21, 2001	N/A	Drain Field	N/A	3.0	N/A
August 29, 2001	N/A	Drain Field	N/A	3.0	N/A
October 17, 2001	N/A	Drain Field	N/A	3.0	N/A
October 24, 2001	N/A	Drain Field	N/A	2.8	N/A
November 1, 2001	N/A	Drain Field	N/A	2.8	N/A
November 7, 2001	N/A	Drain Field	N/A	2.8	N/A
November 12, 2001	N/A	Drain Field	N/A	2.5	N/A
November 20, 2001	N/A	Drain Field	N/A	2.5	N/A
December 1, 2001	N/A	Drain Field	N/A	2.2	N/A
December 6, 2001	N/A	Drain Field	N/A	2.2	N/A
December 15, 2001	N/A	Drain Field	N/A	2.2	N/A
December 22, 2001	N/A	Drain Field	N/A	2.4	N/A
December 29, 2001	N/A	Drain Field	N/A	2.6	N/A
January 2, 2002	N/A	Drain Field	N/A	2.8	N/A
January 9, 2002	N/A	Drain Field	N/A	2.8	N/A
January 17, 2002	N/A	Drain Field	N/A	2.7	N/A
January 23, 2002	N/A	Drain Field	N/A	2.7	N/A
January 31, 2002	N/A	Drain Field	N/A	2.5	N/A

KEY
N/R = Not Recorded
N/A = Not Avaliable

6/27/02

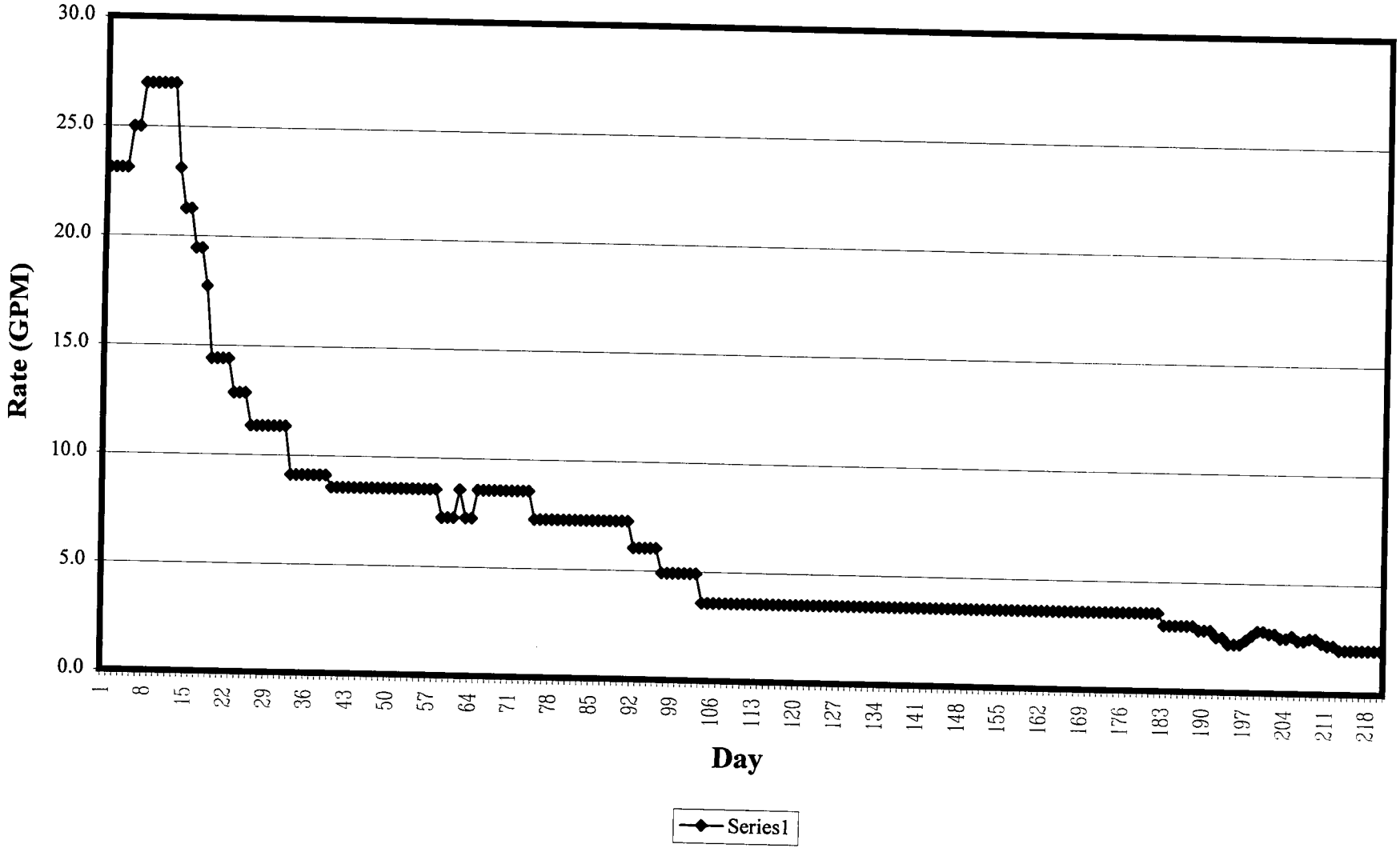
North Lily Mining Company

EVAPORATION SYSTEM/LEACH FIELD GALLERY

February 5, 2002	N/A	Drain Field	N/A	2.5	N/A
February 13, 2002	N/A	Drain Field	N/A	2.6	N/A
February 20, 2002	N/A	Drain Field	N/A	2.4	N/A
March 1, 2002	N/A	Drain Field	N/A	2.4	N/A
March 6, 2002	N/A	Drain Field	N/A	2.5	N/A
March 12, 2002	N/A	Drain Field	N/A	2.5	N/A
March 20, 2002	N/A	Drain Field	N/A	2.3	N/A
March 27, 2002	N/A	Drain Field	N/A	2.2	N/A
April 5, 2002	N/A	Drain Field	N/A	2.2	N/A
April 10, 2002	N/A	Drain Field	N/A	2.0	N/A
April 17, 2002	N/A	Drain Field	N/A	2.0	N/A
April 25, 2002	N/A	Drain Field	N/A	2.0	N/A
May 2, 2002	N/A	Drain Field	N/A	2.0	N/A
May 7, 2002	N/A	Drain Field	N/A	2.0	N/A
May 15, 2002	N/A	Drain Field	N/A	2.0	N/A
May 23, 2002	N/A	Drain Field	N/A	2.0	N/A
May 28, 2002	N/A	Drain Field	N/A	2.0	N/A

KEY
N/R = Not Recorded
N/A = Not Avaliable

Heap Leach Pad Discharge

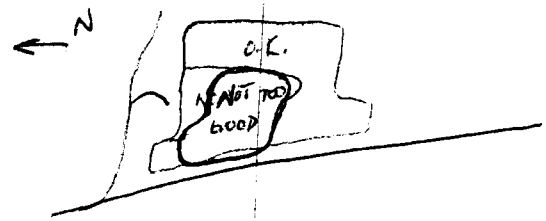


Appendix C

Field Notes

NORTH LILY SECOND QUARTER SAMPLING 05/30/02
(2002)

I ARRIVE ON SITE @ 1235 AT WHICH TIME I PERFORMED A SITE INVESTIGATION. I DID NOT NOTICE ANY VANDALISM ON THE SITE. THE ~~VEGI~~ REVEGITATED SECTIONS OF THE PROPERTY ARE MIXED



I THEN WENT TO THE UPPER DISTRIBUTION BOX AND AQUIRED THE SAMPLES. THE WATER WAS CLEAR WITH A YELLOW TINT. THE WATER WAS RUNNING AT APPROXIMATELY 2 GPM.

THE SAMPLE WAS AQUIRED @ 1305 AND DROPED OF AT CHEMTECH FORD @ 15:00 ON ICE.

This page is a reference page used to track documents internally for the Division of Oil, Gas and Mining

Mine Permit Number M0230007 Mine Name North Lily - Jintic Project
Operator North Lily Mining Co. Date July 10, 2002.
TO _____ FROM _____

__CONFIDENTIAL __BOND CLOSURE __LARGE MAPS X EXPANDABLE
__MULTIPUL DOCUMENT TRACKING SHEET __NEW APPROVED NOI
__AMENDMENT _OTHER_____

Description YEAR-Record Number

__NOI X Incoming __Outgoing __Internal __Superceded

Heap Leach Facility

___NOI __Incoming __Outgoing __Internal __Superceded

__NOI __Incoming __Outgoing __Internal __Superceded

__NOI __Incoming __Outgoing __Internal __Superceded

__TEXT/ 81/2 X 11 MAP PAGES __11 X 17 MAPS __LARGE MAP

COMMENTS: _____

CC: _____